

Date: Thursday, 3/13/2008 1:01:27 PM
 User: Kim Johnston

Process Sheet

13

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 206B FWD X-TUBE
 Job Number : 37981
 Estimate Number : 13219
 P.O. Number :
 This Issue : 3/13/2008 S.O. No. :
 Prsht Rev. : NC Part Number : D206667101TRN
 First Issue : / / Type : LANDING GEAR Drawing Number : D206-667-141REV B
 Previous Run : 37980 Drawing Revision : B
 Material :
 Due Date : 3/28/2008 Qty: 1 Um: Each
 Written By :
 Checked & Approved By : 080313
 Comment : Est Rev:A 08-03-06 new issue DD verified by:ec

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D6001105 Crosstube



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D6001-105 Crosstube BZ9115

Check OD = 2.250"; ID = 1.874"

BC 08.04.04

2.0 MORI SEIKI MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA083

2-Turn first side as per Folio FA083

3-Deburr & Inspect for surface damage.

BC 08.04.04

①

3.0 QC1 INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

BC 08.04.04

①

4.0 MORI SEIKI MORI SEIKI CNC LATHE LARGE



Comment: MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA083

2-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D206-667-141.

3-Remove sand and plugs

BC 08.04.04

①

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 3/13/2008 1:01:27 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206B FWD X-TUBE

Job Number: 37981

Part Number: D206667101TRN

Job Number:



Seq. #:

Machine Or Operation:

Description:

4-Scribe part # and batch # using vibrating stylus as per Dwg D206-667-141
Inside of Cuff(Donot engrave on outside of tube)

5.0

QC1

INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

BC 08.04.04

①

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

ML 08/04/04

①

7.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

ML 08/04/04

1-Polish entire outside surface of crosstube

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

AWM 8-4-7

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BE 08/04/07

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and stock in kanban rack

Location:

X TUBE CELL

AWM 8-4-7

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/04/07

Job Completion



MF

08-04-08

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	37981
Description: Crosstube Assembly (206B High Fwd)		Part Number:	D206-667-141
Inspection Dwg: D206-667-141 Rev: B		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

	Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.240	+0.005/-0.000	2.244	✓			
	2.074	+0.005/-0.000	2.078	✓			
	2.074	+0.005/-0.000	2.078	✓			
	2.114	+0.005/-0.000	2.118	✓			
	2.154	+0.005/-0.000	2.156	✓			
	2.194	+0.005/-0.000	2.196	✓			
	2.234	+0.005/-0.000	2.236	✓			
	0.110	+/-0.010	.110	✓			
	0.300 x 30°	+/-0.010	.300	✓			
	R0.063	+/-0.010	.063	✓			
	R0.500	+/-0.010	.500	✓			
	4.438	+/-0.030	4.438	✓			
SIDE B	2.240	+0.005/-0.000	2.244	✓			
	2.074	+0.005/-0.000	2.078	✓			
	2.074	+0.005/-0.000	2.078	✓			
	2.114	+0.005/-0.000	2.116	✓			
	2.154	+0.005/-0.000	2.157	✓			
	2.194	+0.005/-0.000	2.196	✓			
	2.234	+0.005/-0.000	2.235	✓			
	0.110	+/-0.010	.110	✓			
	0.300 x 30°	+/-0.010	.300	✓			
	R0.063	+/-0.010	.063	✓			
	R0.500	+/-0.010	.500	✓			
	4.438	+/-0.030	4.438	✓			
	93.18	+/-0.020	93.18	✓			

Measured by:	BF	Audited by:		Prototype Approval:	N/A
Date:	08.04.04	Date:		Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.10.24	New Issue (P/O D206-667-101)	KJ/JLM	BF



DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED HDS	APPROVED HDS	DRAWING NO. D206-667-141	REV. B SHEET 1 OF 3
DATE 05.07.26		TITLE CROSSTUBE ASS'Y (206B HIGH FWD)	SCALE NTS
A	00.11.17	NEW ISSUE	
B	05.07.26	ADD HOLES AND NUT PLATES FOR COMPATABILITY WITH BHT/AA SKIDTUBES	

RELEASED
05.07.26

UNDER REVIEW
06.08.10 PH
re.dwn del. F
PH
07.01.25

Qty	Part Number	Description
X	D206-667-141	CROSSTUBE ASSEMBLY (206B HIGH FWD)
1	D6001-105	CROSSTUBE
2	D2856-400-694	ABRASION STRIP
2	D2873-043	NUT PLATE
2	D2873-045	NUT PLATE
2	D2891-1	SUPPORT
14	MS20601AD4W8	RIVET (OR NAS9302B-4-8)
4	MS21920-20	CLAMP

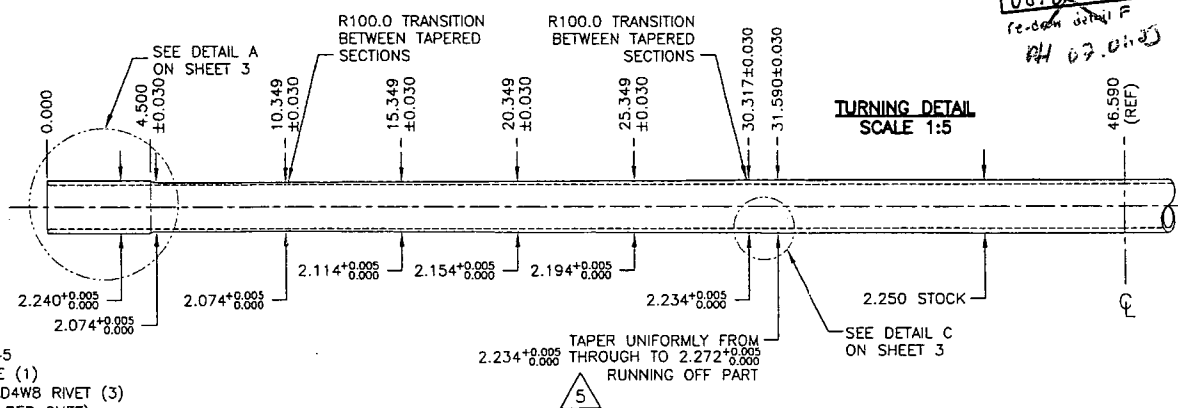
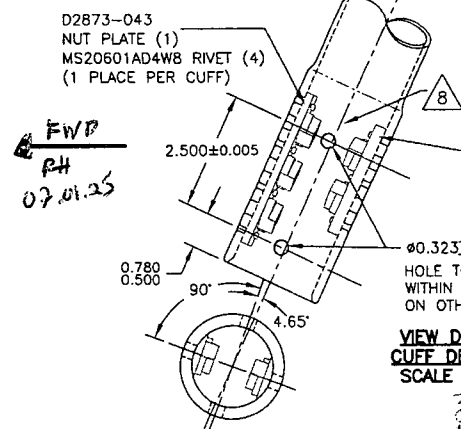
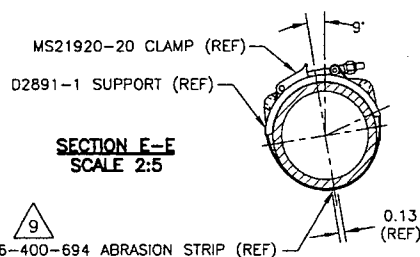
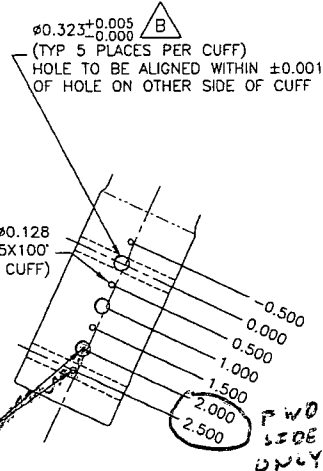
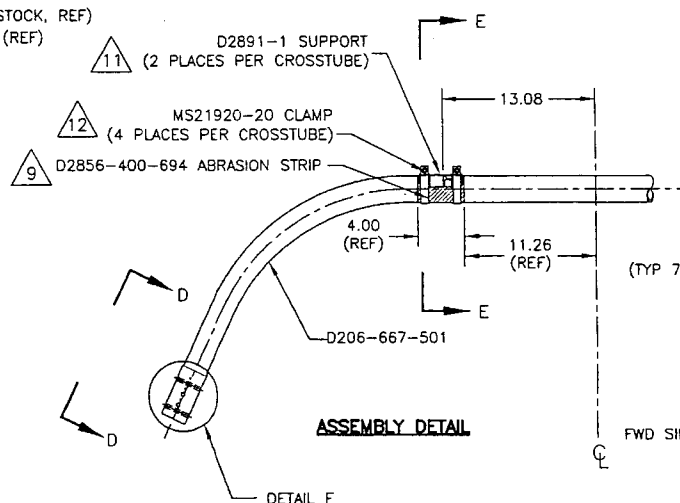
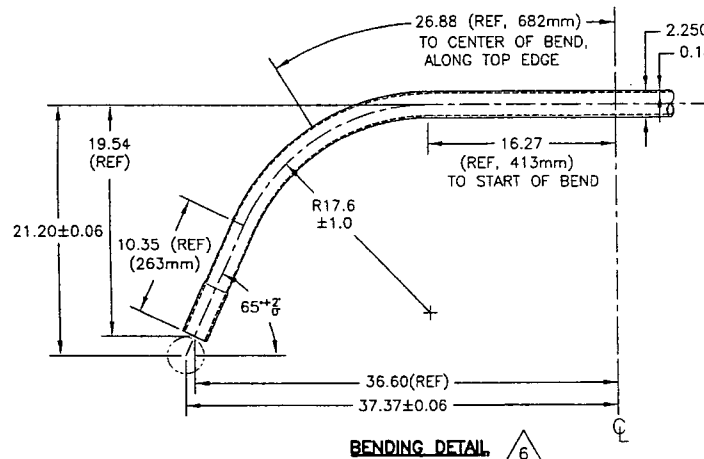
GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 2) MATERIAL: MANUFACTURED FROM D6001-105
FINISHED LENGTH = 93.18±0.020
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 4) PART IS SYMMETRIC ABOUT CENTERLINE.
- 5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALLY, TRANSITION SHOULD BE SMOOTH.
- 6) BEND PROGRESSIVELY WITH A MINIMUM OF 12 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
- 9) INSTALL D2856-400-694 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D2891-1 SUPPORT, PER QSI 035.
- 10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 11) IT IS OPTIONAL TO SEAL EDGES OF SUPPORTS AND ABRASION STRIP USING SIKAFLEX-241/291 SEALANT.
- 12) TORQUE CLAMPS 80 TO 100 IN-LB.

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37981

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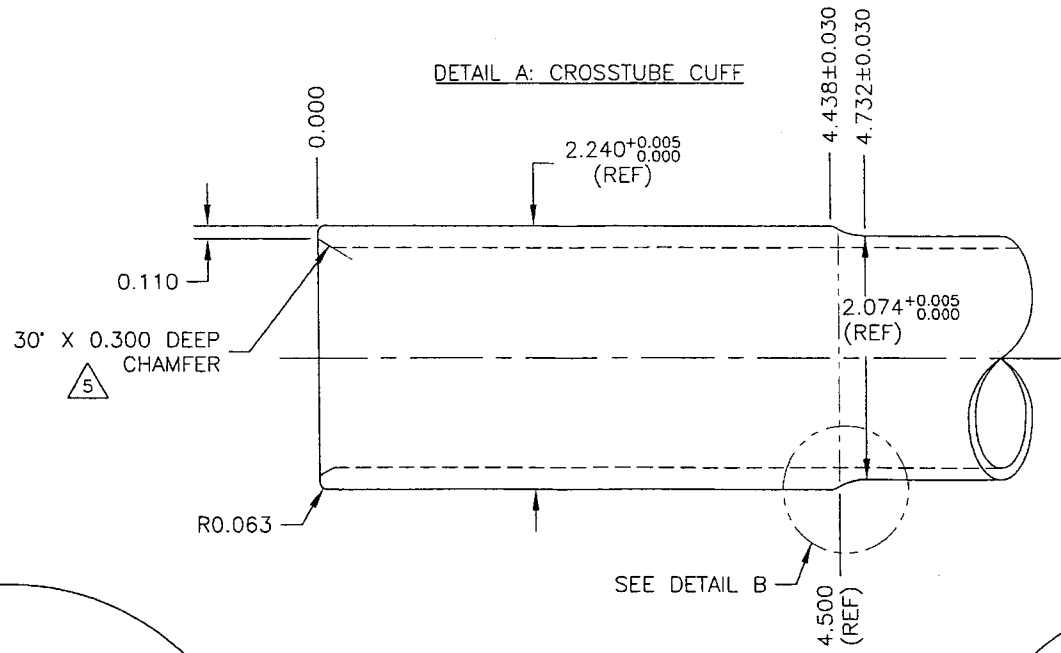
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06.08.10 PH
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PH 07.01.25

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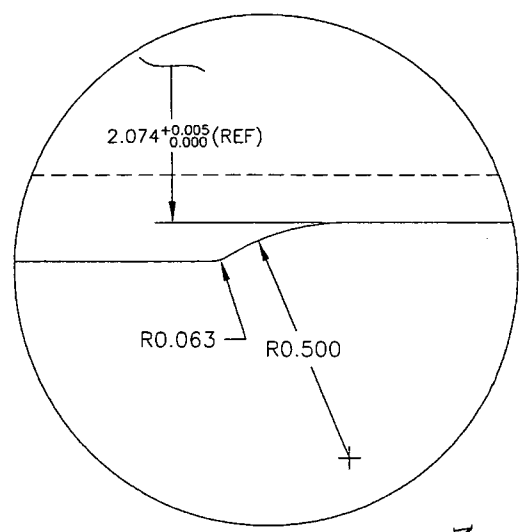
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CHECKED DS	APPROVED DS	DRAWING NO. D206-667-141	REV. B SHEET 2 OF 3
DATE 05.07.26	TITLE CROSSTUBE ASS'Y (206B HIGH FWD)	SCALE 1:10	

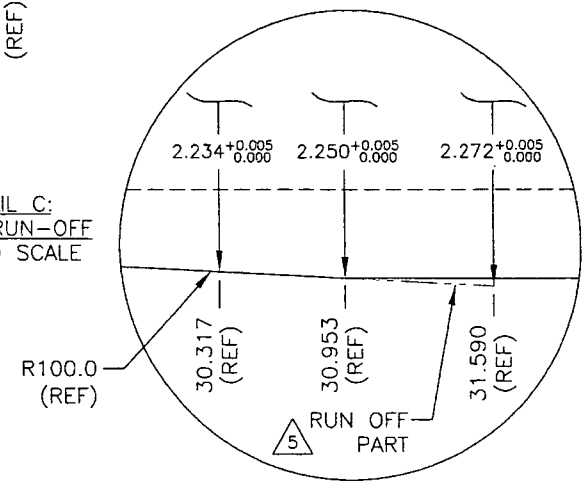
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UNDER REVIEW
 06.03.06 PH
 re-draw 06.01.06
 PH
 02.01.25
 05.07.26 #



DETAIL C:
 TAPER RUN-OFF
 NOT TO SCALE



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CHECKED #DS		APPROVED #DS		DRAWING NO.	REV. B
DATE 05.07.26				D206-667-141	SHEET 3 OF 3
				TITLE	SCALE
				CROSSTUBE ASS'Y (206B HIGH FWD)	1:1